MONTHLY REPORT OF OPERATION OF WATER TREATMENT PLANT

State Form 34609 (R8 / 12-12)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

System Name East Chicago Water Dept. POE 1 PWSID Number 5245012

For the Month of September 2016 IDEM Field Rep Mahoney

Signed [signature] Title Plant Manager

I certify, ***under penalty of law***, by this signature that this document was prepared by me, or under my direction, and the information submitted is to the best of my knowledge and belief, true, accurate and complete, ***I am also aware that there are significant penalties for submitting false information.*** Certification Number 018556

PHYSICAL AND CHEMICAL DATA *

Date	Turbidity		Alkalinity		pH		Hardness		Iron		Manganese		Phosphate	Fluoride	
	Raw	Finished	Raw	Finished	Raw	Finished	Raw	Finished	Raw	Finished	Raw	Finished	Finished	Finished	
1	13.6	.03			8.26	7.79							.08		
2	10.0	.04			8.28	7.77							.11		
3	5.6	.04			8.36	7.74							.04		
4	4.1	.04			8.35	7.67							.08		
5	3.2	.04			8.31	7.71							.08		
6	5.6	.04			8.30	7.73							.07		
7	6.1	.04			8.12	7.68							.06		
8	4.0	.04			8.24	7.58							.07		
9	3.5	.04			8.30	7.72							.21		
10	2.8	.04			8.25	7.70							.22		
11	3.1	.04			8.19	7.67							.21		
12	4.7	.03			8.26	7.67							.21		
13	2.9	.03			8.21	7.72							.19		
14	3.4	.03			8.20	7.73							.19		
15	2.6	.04			8.31	7.75							.19		
16	3.0	.04			8.24	7.75							.17		
17	1.6	.03			8.23	7.74							.23		
18	2.0	.03			8.20	7.72							.22		
19	2.4	.04			8.20	7.70							.21		
20	2.5	.04			8.20	7.72							.23		
21	2.5	.04			8.21	7.70							.21		
22	3.3	.04			8.20	7.75							.21		
23	2.6	.04			8.15	7.67							.22		
24	2.9	.04			8.27	7.69							.16		
25	2.4	.04			8.26	7.69							.21		
26	4.0	.03			8.20	7.72							.22		
27	4.9	.04			8.26	7.72							.22		
28	3.2	.04			8.23	7.72							.22		
29	3.2	.04			8.23	7.72							.22		
30	22.0	.04			8.24	7.74							.20		
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* All parameters are to be expressed in mg/1 except pH and turbidity

DUE BY THE 10TH OF THE MONTH FOLLOWING THE REPORTING PERIOD

East Chicago Water Dept. 5245012 POE 1

Date	Water Treated	Chemicals Used – Pounds								Filters		Chlorine Residual				Remarks
												Plant Tap		D. S.		
	1000 gallons	Salt	Alum	Lime	Soda Ash	Carbon	Chlorine	Fluoride	Phos-phate	Filter Run *(hours)*	Gallons per wash x 1000	Free	Total	Free	Total	
1	7440		994				175		6.5	120		1.32	1.52	.73	.91	
2	7460		889				193		6.5	117	134	1.20	1.41	.81	.97	
3	7393		893				181		4.9	120		1.33	1.53	.80	.99	
4	7423		851				183		6.5	120		1.27	1.47	1.10	1.30	
5	7431		845				182		6.5	120		1.26	1.48	.95	1.12	
6	7347		794				178		8.2	117	188	1.25	1.45	.84	1.03	
7	7284		750				163		4.9	117	155	1.48	1.68	1.15	1.32	
8	7310		758				164		6.5	118.5	149	1.42	1.62	.79	.99	
9	7366		760				170		8.2	120		1.35	1.52	.99	1.18	
10	7330		760				176		4.9	120		1.29	1.49	.91	1.22	
11	7364		768				179		6.5	120		1.26	1.48	.90	1.12	
12	7362		756				174		3.3	117	167	1.30	1.51	.71	.86	
13	7304		774				177		11.4	117	99	1.33	1.55	.88	1.10	
14	7324		794				174		3.3	118.5	135	1.40	1.63	.93	1.10	
15	7324		766				147		8.2	120		1.42	1.66	.58	.89	
16	7283		762				137		6.5	117	151	1.40	1.62	1.20	1.40	
17	7207		764				127		6.5	120		1.47	1.70	1.16	1.40	
18	7286		750				126		4.9	120		1.39	1.60	1.30	1.45	
19	7244		762				122		6.5	117	137	1.30	1.51	.91	1.11	
20	7216		746				126		6.5	117	121	1.34	1.57	1.12	1.50	
21	7183		772				128		4.9	118.5	113	1.43	1.65	.84	1.15	Monthly Water Treatment
22	7182		760				124		6.5	117	116	1.36	1.58	1.06	1.36	Total Gallons 218,380
23	7197		744				122		4.9	118.5	125	1.33	1.54	1.02	1.21	Max. Day 7460
24	7230		762				130		13.1	120		1.32	1.52	1.00	1.30	Min. Day 6957
25	7226		756				128		3.3	120		1.23	1.44	1.02	1.26	Avg. Daily 7279
26	7197		764				129		6.5	117	163	1.20	1.41	.84	1.04	
27	7216		764				128		4.9	117	141	1.23	1.43	.68	.87	
28	7245		756				150		6.5	118.5	141	1.28	1.46	.93	1.15	Mail To: **Indiana Department of Environmental Management** Drinking Water Branch 100 N. Senate Ave. Room N1201 Indianapolis, IN 46204-2237
29	7049		849				150		3.3	120		1.28	1.46	.60	.74	
30	6957		899				151		6.5	117	146	1.30	1.50	.96	1.20	
31																

Part of State Form 34609 (R9 / 1-16)

MONTHLY INDIVIDUAL FILTER EFFLUENT (IFE) TURBIDITY MONITORING

State Form 53293 (R2 / 10-13)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM)
OFFICE OF WATER QUALITY – DRINKING WATER BRANCH – COMPLIANCE SECTION

INSTRUCTIONS: 1. *Individual filters must be monitored continuously recorded every fifteen (15) minutes. Exceedance of the performance requirement triggers follow-up action (i.e. it is not a violation).*
2. *If there is a failure in the continuous turbidity monitoring equipment, Subpart H systems serving a population of at least ten thousand (10,000) individuals must conduct grab sampling every four (4) hours instead of continuous monitoring, but for no more than five (5) working days following the failure of the equipment Subpart H system serving a population of fewer than ten thousand (10,000) individuals must conduct grab sampling every four (4) hours instead of continuous monitoring until the turbidimeter is back in operation. The system has fourteen (14) days to resume continuous monitoring before a violation is incurred.*
3. *The system must report the filter number, turbidity measurements and date(s) on which the exceedance occurred by the 10th of the next month.*
4. *When turbidity levels are exceeded in consecutive months, the water system must provide to IDEM all previous consecutive monthly monitoring forms for which the filter exceeded the levels.*

	For systems that serves at least 10,000 people	**For systems that serves less than 10,000 people**
*	The system must both produce a filter profile within seven (7) days of the exceedance and report that it has been produced, or report the cause of the exceedance *(if known)*. Attach information identifying every 15-min turbidity reading that caused the exceedance.	Attach information identifying every 15-min turbidity reading that caused the exceedance. Report the cause of the exceedance *(if known)*. No filter profiling requirements.
**	The system must both produce a filter profile for the filter within seven (7) days of the exceedance and report that it has been produced, or report the obvious reason for the exceedance *(if known)*.	Report the cause of the exceedance *(if known)*.
***	The system must conduct a self-assessment of the filter within fourteen (14) days of the exceedance and report that it was conducted.	The system must conduct a self-assessment of the filter within fourteen (14) days of the exceedance and report that it was conducted.
****	A comprehensive performance evaluation (CPE) must be arranged no later than thirty (30) days after the filter exceeded 2.0 NTU for the second straight month. The CPE must be completed and the report submitted within ninety (90) days of the exceedance.	A comprehensive performance evaluation (CPE) must be arranged no later than sixty (60) days after the filter exceeded 2.0 NTU for the second straight month, and must be completed and the report submitted within 120 days after the final exceedance.

☑ Yes ☐ No Did every individual filter that was in operation have at least 95% of its turbidity measurements at or below 0.15 NTU this month?

☐ Yes ☑ No Did any individual filter have a measured turbidity greater than 0.3 NTU in two (2) consecutive measurements taken fifteen (15) minutes apart this month?

☑ Yes ☐ No Were at least 95% of the turbidity measurements taken at the combined filter effluent at or below 0.15 NTU during this month?

PWSID # 5245012	System Name: East Chicago Water Dept	
Treatment Plant Name/Number: Conventional POE 1 **Address:** 3330 Aldis Ave East Chicago, IN **County:** Lake		*Please submit completed forms to:* OWQ Drinking Water – Mail Code 66-34 100 N. Senate Avenue Indianapolis, IN 46204-2251 Fax (317) 234-7436
Submitted by: Pete Harretos	**Month** 09	**Year** 2016

Total Number of Filters: 5

Was each filter monitored continuously? Yes

Were measurements recorded every fifteen (15) minutes? Yes

Was there any failure of the continuous monitoring equipment? NO

Answer these two questions *only* if there was a failure in the continuous monitoring equipment:

Longest duration for the continuous monitoring equipment failure: _____ hours

Were grab samples collected every four hours? _____

Date	List filters with turbidity levels >1.0 NTU for two consecutive 15-min measurements *	List filters with turbidity levels >0.5 NTU for two consecutive 15-min measurements after the first 4 hrs of operation **	List filters with turbidity levels >1.0 NTU for two consecutive 15-min measurements in 3 consecutive months ***	List filters with turbidity levels >2.0 NTU for two consecutive 15-min measurements in 2 consecutive months ****	Turbidity (NTU)

IE/LT1 SWTR COMBINED FILTER EFFLUENT TURBIDITY

State Form 53294 (6-07)
Indiana Department of Environmental Management (IDEM)
Office of Water Quality - Drinking Water Branch - Compliance Section

INSTRUCTIONS: Please submit completed forms to: IDEM OWQ Drinking Water, Mail Code 66-34, 100 N Senate Ave, Indianapolis, IN 46204-2251

PWSID: IN5245012

System Name: East Chicago Water Dept

Plant Number: 01

Plant Name: Conventional

This form must be completed and submitted to IDEM within the first ten (10) days after the end of the monitoring period in which the samples were collected.

Monitoring Period (MM/DD/YYYY): 09 / 01 / 2016

Please submit completed form to:
IDEM OWQ - Drinking Water Branch
100 N Senate Avenue
Indianapolis, IN 46204-2251

Day	Hours of Operation	Raw Water Turbidity	Record Combined Effluent Turbidity Every Four Hours on a Daily Basis 1st	2nd	3rd	4th	5th	6th	Daily Max	Number >0.3 NTU
1	24.0	13.6	.04	.03	.03	.03	.04	.03	.04	
2	24.0	10.0	.04	.04	.04	.04	.04	.04	.04	
3	24.0	5.6	.04	.04	.04	.04	.04	.04	.04	
4	24.0	4.1	.04	.04	.04	.04	.04	.04	.04	
5	24.0	3.2	.04	.04	.04	.03	.03	.03	.04	
6	24.0	5.6	.03	.03	.03	.04	.04	.04	.04	
7	24.0	6.1	.04	.04	.04	.04	.04	.04	.04	
8	24.0	4.0	.04	.04	.04	.04	.04	.04	.04	
9	24.0	3.5	.04	.04	.04	.04	.04	.04	.04	
10	24.0	2.8	.04	.04	.04	.04	.04	.04	.04	
11	24.0	3.1	.04	.03	.03	.03	.03	.03	.04	
12	24.0	4.7	.03	.03	.03	.03	.04	.03	.04	
13	24.0	2.9	.03	.03	.03	.03	.04	.04	.04	
14	24.0	3.4	.04	.03	.03	.03	.04	.04	.04	
15	24.0	2.6	.04	.04	.04	.04	.04	.04	.04	
16	24.0	3.0	.04	.03	.03	.04	.04	.03	.04	
17	24.0	1.6	.03	.03	.03	.03	.03	.03	.03	
18	24.0	2.0	.03	.03	.03	.03	.03	.03	.03	
19	24.0	2.4	.03	.04	.04	.04	.04	.04	.04	
20	24.0	2.5	.04	.04	.04	.04	.04	.04	.04	
21	24.0	2.5	.04	.04	.04	.04	.04	.04	.04	
22	24.0	3.3	.04	.04	.04	.04	.04	.04	.04	
23	24.0	2.6	.04	.04	.04	.04	.04	.04	.04	
24	24.0	2.9	.04	.04	.04	.04	.05	.04	.04	
25	24.0	2.4	.04	.04	.04	.03	.03	.03	.04	
26	24.0	4.0	.03	.03	.03	.03	.03	.04	.04	
27	24.0	4.9	.04	.04	.04	.04	.04	.04	.04	
28	24.0	3.2	.04	.04	.04	.04	.04	.04	.04	
29	24.0	3.2	.04	.04	.04	.04	.04	.04	.04	
30	24.0	22.0	.04	.04	.04	.04	.05	.04	.05	
31										

I hereby certify that all the information submitted herein is true and accurate to the best of my knowledge.

Completed By: [signature] Date: 10/6/16 Reviewed by: [signature]

CHLORINE AND CHLORAMINES RESIDUAL REPORTING (POE)

State Form 53295 (R / 3-12)
Indiana Department of Environmental Management (IDEM)
Office of Water Quality - Drinking Water Branch - Compliance Section

INSTRUCTIONS: Please submit completed forms to: IDEM OWQ Drinking Water, Mail Code 66-34, 100 N Senate Ave, Indianapolis, IN 46204-2251.

PWSID: IN5275012 Plant Number: 01 System Name: East Chicago water Dept

☑ Chlorine ☐ Chloramines Plant Name: Conventional

This form must be completed and submitted to IDEM within the first ten (10) days after the end of the monitoring period in which the samples were collected.

Monitoring Period *(mm/dd/yyyy)*: 09 / 01 / 2016

Please submit completed form to:
IDEM - Drinking Water Branch
100 N Senate Avenue
Indianapolis, IN 46204-2251

Daily Point-of-Entry (POE) Residual (Subpart H Systems Only)

If you are using chlorine, check the chlorine box above and report free chlorine results.
If you are using chloramines, check the chloramines box above and report total chlorine results.
If residual is below 0.2 for free chlorine or 0.5 for total chlorine below minimum required level, check the box below.

Day	Lowest Residual @ POE (mg/L)	Check here if below minimum required level.	Date reported if below required minimum level *(mm/dd/yy)*	Day	Lowest Residual @ POE (mg/L)	Check here if below minimum required level.	Date reported if below required minimum level *(mm/dd/yy)*
1	1.2	☐		17	1.4	☐	
2	1.2	☐		18	1.4	☐	
3	1.3	☐		19	1.2	☐	
4	1.2	☐		20	1.3	☐	
5	1.2	☐		21	1.4	☐	
6	1.2	☐		22	1.3	☐	
7	1.3	☐		23	1.3	☐	
8	1.4	☐		24	1.3	☐	
9	1.3	☐		25	1.2	☐	
10	1.2	☐		26	1.2	☐	
11	1.2	☐		27	1.2	☐	
12	1.2	☐		28	1.2	☐	
13	1.3	☐		29	1.2	☐	
14	1.3	☐		30	1.2	☐	
15	1.3	☐		31		☐	
16	1.3	☐		Example	0.1	☒	052806

Note:
As per **327 IAC 8-2-8.8(c)**, systems serving more than 3,300 customers are required to continuously monitor the residual disinfectant concentration of the water entering the distribution system and must record the lowest value each day. If there is a failure in their monitoring equipment, grab sampling is required every four (4) hours, but for no more than two (2) working days following failure of the equipment.

Certification:

All POE residual disinfectant sampling have been properly carried out by me or under my direct supervision following the approved methods specified by the rule, as per 327 IAC 8-2-8.7(5). All residual testing equipment has been properly calibrated with a grab sample at least every five (5) days, as per 327 IAC 8-2-8.7(5)(F). I certify that this system complied with all the rule requirements applicable for this monitoring / reporting period.

Completed by: Pete Harretos **Signature:** [signature]

Title: Plant Manager **Date:** 10/06/2016

CHLORINE AND CHLORAMINES RESIDUAL REPORTING (DS)

State Form 53296 (R / 5-12)
Indiana Department of Environmental Management (IDEM)
Office of Water Quality - Drinking Water Branch - Compliance Section

INSTRUCTIONS: Please submit completed forms to: IDEM OWQ Drinking Water, Mail Code 66-34, 100 N Senate Ave, Indianapolis, IN 46204-2251.

PWSID: IN5245012

System Name: East Chicago Water Dept

☑ **Chlorine** ☐ **Chloramines** *(Indicate the residual disinfectant used throughout your distribution system.)*

This form must be completed and submitted to IDEM within the first ten (10) days after the end of the monitoring period in which the samples were collected.

Monitoring Period *(mm/dd/yyyy)*: 09 / 01 / 2016

Please submit completed form to:

IDEM - Drinking Water Branch
100 N Senate Avenue
Indianapolis, IN 46204-2251

Distribution System Residual

Total Number of Monthly Samples Required: 30
(Must be equal to the number of Total Coliform Samples Required.)

Number of Disinfectant Residual Samples Collected: 48

Distribution System Residual Disinfectant Average this month: 0.9 mg/L
(Must be greater than or equal to 0.2 mg/L for free chlorine or 0.5 mg/L for total chlorine and less than or equal to 4.0 mg/L.)

Distribution System Running Annual Average *(leave blank if unknown)*: 1.1 mg/L

Number of Samples where Disinfectant Residual was not Detected: 0

Percent of Monthly Samples where Disinfectant Residual was not Detected: 0.0 %
(Must not exceed 5.0% as per 327 IAC 8-2-8.6(3).)

Certification:

All residual disinfectant sampling have been properly carried out by me or under my direct supervision following the approved methods specified by the rule, as per 327 IAC 8-2-8.7(5). All residual testing equipment has been properly calibrated with a grab sample at least every five (5) days, as per 327 IAC 8-2-8.7(5)(F). I certify that this system complied with all the rule requirements applicable for this monitoring / reporting period.

Completed by: Pete Harretos **Signature:** [signature]

Title: Plant Manager **Date:** 10 / 06 / 2016

IMPORTANT NOTE FOR SUBPART H (SURFACE WATER OR GWUDI) SYSTEMS:

Subpart H (surface water or groundwater under direct influence from surface water) systems are also required to complete a separate form for Point-of-Entry residual.

Please contact IDEM if Heterotrophic Plate Count (HPC) is being used in lieu of disinfectant residual monitoring.

EAST CHICAGO WATER FILTRATION PLANT

Backwash Recycling Record

PWSID 5245012

Sep-16

	Recycled	Plant Production	Recycled	Plant Production	%
Date	gal/day	gal/day	gal/min	gal/min	Recycled
9/1/2016	-	7,440,000	0	5167	0.0%
9/2/2016	267,000	7,460,000	185	5181	3.6%
9/3/2016	-	7,393,000	0	5134	0.0%
9/4/2016	-	7,423,000	0	5155	0.0%
9/5/2016	-	7,431,000	0	5160	0.0%
9/6/2016	376,000	7,347,000	261	5102	5.1%
9/7/2016	309,000	7,284,000	215	5058	4.2%
9/8/2016	149,000	7,310,000	103	5076	2.0%
9/9/2016	-	7,366,000	0	5115	0.0%
9/10/2016	-	7,330,000	0	5090	0.0%
9/11/2016	-	7,364,000	0	5114	0.0%
9/12/2016	333,000	7,362,000	231	5113	4.5%
9/13/2016	198,000	7,304,000	138	5072	2.7%
9/14/2016	135,000	7,324,000	94	5086	1.8%
9/15/2016	-	7,324,000	0	5086	0.0%
9/16/2016	302,000	7,283,000	210	5058	4.1%
9/17/2016	-	7,207,000	0	5005	0.0%
9/18/2016	-	7,286,000	0	5060	0.0%
9/19/2016	273,000	7,244,000	190	5031	3.8%
9/20/2016	242,000	7,216,000	168	5011	3.4%
9/21/2016	113,000	7,183,000	78	4988	1.6%
9/22/2016	232,000	7,182,000	161	4988	3.2%
9/23/2016	125,000	7,197,000	87	4998	1.7%
9/24/2016	-	7,230,000	0	5021	0.0%
9/25/2016	-	7,226,000	0	5018	0.0%
9/26/2016	326,000	7,197,000	226	4998	4.5%
9/27/2016	282,000	7,216,000	196	5011	3.9%
9/28/2016	141,000	7,245,000	98	5031	1.9%
9/29/2016	-	7,049,000	0	4895	0.0%
9/30/2016	292,000	6,957,000	203	4831	4.2%
10/1/2016			#VALUE!	#VALUE!	#VALUE!

FILTER BACKWASH RECYCLING RULE (FBRR) RECORDKEEPING
State Form 54186 (2-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM)
OFFICE OF WATER QUALITY - DRINKING WATER BRANCH - COMPLIANCE SECTION

MONTH Sep **YEAR** 2016

PWSID: 5245012 **System Name:** East Chicago Water Dept.
Plant/POE: _____

Type of Recycle Stream	Indicate Frequency at which flow is returned (or N/A)
Spent Filter Backwash	as needed
Thickener Supernatant	na
Liquids from Dewatering Process	na
Other (specify):	na

Filter Information	Filter Number/ID			
	1	2	3	4
Average Duration of Backwash (in minutes)	16	15	15	16
Maximum Duration of Backwash (in minutes)	16	16	16	16
Average Backwash Flow (in gpm)	9,385.4	8,033.3	9,400.0	9,041.6
Maximum Backwash Flow (in gpm)	13,466.6	10,500.0	11,571.4	11,000.0
Run Length Time of Filter (include units)	122 hrs	115 hrs	129 hrs	126 hrs
Criteria for Terminating Filter Run	Head Loss: ☐ Run Time: ☒ Turbidity: ☒	Head Loss: ☐ Run Time: ☒ Turbidity: ☒	Head Loss: ☐ Run Time: ☒ Turbidity: ☒	Head Loss: ☐ Run Time: ☒ Turbidity: ☒

Was treatment or equalization provided to the recycle flows? ☐ **Yes** ☒ **No**

If yes, please complete the following table:

Type of Treatment Provided Before Recycling	
Typical Hydraulic Loading Rate (gpm/ft^2)	
Maximum Hydraulic Loading Rate (gpm/ft^2)	
Specify Type of Chemical Used	
Average Dose of Chemical (mg/L)	
Frequency of Chemical Addition	
Frequency at Which Solids are Removed	
Monthly Amount of Solids Removed	
Disposal or Treatment Method Used to Treat the Solids	

FILTER BACKWASH RECYCLING RULE (FBRR) RECORDKEEPING

State Form 54186 (2-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM)
OFFICE OF WATER QUALITY - DRINKING WATER BRANCH - COMPLIANCE SECTION

MONTH Sep **YEAR** 2016

PWSID: 5245012 **System Name:** East Chicago Water Dept.
Plant/POE: _____

Type of Recycle Stream	Indicate Frequency at which flow is returned (or N/A)
Spent Filter Backwash	as needed
Thickener Supernatant	na
Liquids from Dewatering Process	na
Other (specify):	na

Filter Information	Filter Number/ID			
	6			
Average Duration of Backwash (in minutes)	15			
Maximum Duration of Backwash (in minutes)	16			
Average Backwash Flow (in gpm)	9,655.5			
Maximum Backwash Flow (in gpm)	12,428.5			
Run Length Time of Filter (include units)	115 hrs			
Criteria for Terminating Filter Run	Head Loss: ☐ Run Time: ☒ Turbidity: ☒	Head Loss: ☐ Run Time: ☐ Turbidity: ☐	Head Loss: ☐ Run Time: ☐ Turbidity: ☐	Head Loss: ☐ Run Time: ☐ Turbidity: ☐

Was treatment or equalization provided to the recycle flows? ☐ **Yes** ☒ **No**

If yes, please complete the following table:

Type of Treatment Provided <u>Before</u> Recycling	
Typical Hydraulic Loading Rate (gpm/ft^2)	
Maximum Hydraulic Loading Rate (gpm/ft^2)	
Specify Type of Chemical Used	
Average Dose of Chemical (mg/L)	
Frequency of Chemical Addition	
Frequency at Which Solids are Removed	
Monthly Amount of Solids Removed	
Disposal or Treatment Method Used to Treat the Solids	

EAST CHICAGO WATER WORKS
REPORT OF BACTERIOLOGICAL ANALYSES

PWSID #5245012 MONTH SEPTEMBER 2016 LAB ID #M-45-2

SAMPLE COLLECTION						RECEIVED IN LAB			ANALYSES			COLILERT RESULTS	
SAMPLE #	LOCATION	CHLORINE RESIDUAL	DATE	TIME	SAMPLER	DATE	TIME	RECEIVED BY	ANALYST	DATE	TIME	TOTAL COLIFORM	E-COLI
1	02	.02	9-1	11:25 AM	WR	9-1	11:55 AM	WR	WR	9-1	12:55 PM	A	A
2	10	1.02	9-1	10:35 AM	WR	9-1	11:55 AM	WR	WR	9-1	12:55 PM	A	A
3	04	.62	9-1	9:55 AM	WR	9-1	11:55 AM	WR	WR	9-1	12:55 PM	A	A
4	03	1.48	9-1	9:55 AM	WR	9-1	11:55 AM	WR	WR	9-1	12:55 PM	A	A
5	04	1.07	9-6	10:12 AM	WR	9-6	10:53 AM	WR	WR	9-6	12:55 PM	A	A
6	14	.76	9-6	10:50 AM	WR	9-6	10:55 AM	WR	WR	9-6	12:55 PM	A	A
7	11	1.22 1.41	9-7	9:55 AM	WR	9-7	11:45 AM	WR	WR	9-6	12:55 PM	A	A
8	03	1.40	9-7	9:55 AM	WR	9-7	9:00 AM	WR	WR	9-7	12:55 PM	A	A
9	16	1.16	9-7	10:33 AM	WR	9-7	11:00 AM	WR	WR	9-7	12:55 PM	A	A
10	17	1.23	9-8	9:55 AM	WR	9-8	11:26 AM	WR	WR	9-8	12:46 PM	A	A
11	06	.74	9-8	10:35 AM	WR	9-8	11:26 AM	WR	WR	9-8	12:46 PM	A	A
12	02	.79	9-12	11:22 AM	WR	9-12	11:33 AM	WR	WR	9-12	12:55 PM	A	A
13	15	.68	9-12	10:40 AM	WR	9-12	11:33 AM	WR	WR	9-12	12:55 PM	A	A
14	12	1.16	9-12	9:40 AM	WR	9-12	11:35 AM	WR	WR	9-12	12:55 PM	A	A
15	09	1.06	9-13	10:25 AM	WR	9-13	11:16 AM	WR	WR	9-13	12:25 PM	A	A
16	05	.94	9-13	10:35 AM	WR	9-13	11:16 AM	WR	WR	9-13	12:25 PM	A	A

P=PRESENT A=ABSENT

NUMBER OF DISTRIBUTION SAMPLES REQUIRED - 30
ALL SAMPLES ANALYZED ARE 100 ml. VOLUME
TOTAL NUMBER OF SAMPLES ANALYZED 30
NUMBER OF COLIFORM POSITIVE 0
PERCENTAGE THAT ARE COLIFORM POSITIVE 0%

3455 PENNSYLVANIA AVE.
EAST CHICAGO, IN 46312
PHONE 219-391-8487

LABORATORY DIRECTOR [signature] DATE 10/6/16 PAGE 1 OF 2

EAST CHICAGO WATER WORKS
REPORT OF BACTERIOLOGICAL ANALYSES

PWSID #5245012 MONTH SEPTEMBER 2016 LAB ID #M-45-2

SAMPLE COLLECTION						RECEIVED IN LAB			ANALYSES			COLILERT RESULTS	
SAMPLE #	LOCATION	CHLORINE RESIDUAL	DATE	TIME	SAMPLER	DATE	TIME	RECEIVED BY	ANALYST	DATE	TIME	TOTAL COLIFORM	E-COLI
17	10	.72 .91	9-14	10:55 AM	WR	9-14	11:36 AM	WR	WR	9-17	12:28 PM	A	A
18	07	1.13 1.29	9-14	10:32 AM	WR	9-14	11:26 AM	WR	WR	9-14	12:26 PM	A	A
19	09	.61 .64	9-15	9:45 AM	WR	9-15	11:42 AM	WR	WR	9-15	12:24 PM	A	A
20	04	.99 1.13	9-15	10:30 AM	WR	9-15	11:40 AM	WR	WR	9-15	12:20 PM	A	A
21	14	.84 1.01	9-26	11:55 AM	WR	9-26	11:25 AM	WR	WR	9-26	12:30 PM	A	A
22	11	.86 1.07	9-26	11:45 AM	WR	9-26	11:25 AM	WR	WR	9-26	12:50 PM	A	A
23	03	.89 1.03	9-26	11:35 AM	WR	9-26	11:25 AM	WR	WR	9-26	12:55 PM	A	A
24	06	.50 .60	9-27	9:55 AM	WR	9-27	11:35 AM	WR	WR	9-27	12:29 PM	A	A
25	15	.60 .81	9-27	11:15 AM	WR	9-27	11:35 AM	WR	WR	9-27	12:26 PM	A	A
26	12	.92 1.19	9-27	9:35 AM	WR	9-27	11:35 AM	WR	WR	9-27	12:22 PM	A	A
27	05	.91 1.08	9-28	11:05 AM	WR	9-28	11:40 AM	WR	WR	9-28	12:50 PM	A	A
28	08	.97 1.21	9-28	10:32 AM	WR	9-28	11:42 AM	WR	WR	9-28	12:50 PM	A	A
29	10	.69 .85	9-29	10:05 AM	WR	9-29	11:32 AM	WR	WR	9-29	1:00 PM	A	A
30	09	.50 .63	9-29	9:43 AM	WR	9-29	11:30 AM	WR	WR	9-29	1:30 PM	A	A

P=PRESENT A=ABSENT

NUMBER OF DISTRIBUTION SAMPLES REQUIRED - 30
ALL SAMPLES ANALYZED ARE 100 ml. VOLUME
TOTAL NUMBER OF SAMPLES ANALYZED 30
NUMBER OF COLIFORM POSITIVE 0
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LABORATORY DIRECTOR [signature] DATE 10/6/16 PAGE 2 OF 2